## SEQUENCE LISTING

```
<110> MURRAY, SAMUEL S.
      BEHNAM, KEYVAN
      MURRAY, ELSA J. (BROCHMANN)
<120> BONE MORPHOGENIC PROTEIN BINDING PEPTIDE
<130> 038586-0330002
<140> 10/587,313
<141> 2006-07-26
<150> PCT/US2005/002722
<151> 2005-01-28
<150> 60/539,903
<151> 2004-01-28
<160> 15
<170> PatentIn Ver. 3.3
<210> 1
<211> 19
<212> PRT
<213> Bos taurus
<400> 1
Cys Arg Ser Thr Val Arg Met Ser Ala Glu Gln Val Gln Asn Val Trp
                                                          15
                                      10
                  5
Val Arg Cys
<210> 2
<211> 57
<212> DNA
<213> Bos taurus
<220>
<221> CDS
<222> (1)..(57)
<400> 2
tgc aga agc acc gtg cgg atg tct gct gaa cag gtg cag aac gtg tgg
                                                                    48
Cys Arg Ser Thr Val Arg Met Ser Ala Glu Gln Val Gln Asn Val Trp
                                                          15
                                      10
  1
                  5
                                                                    57
gtt cgc tgc
Val Arg Cys
```

```
<210> 3
<211> 41
<212> PRT
<213> Artificial Sequence.
<220>
<223> Description of Artificial Sequence: Synthetic
      peptide
<400> 3
Ile Gln Glu Thr Thr Cys Arg Arg Glu Ser Glu Ala Asp Pro Ala Thr
                                                          15
                                      10
Cys Asp Phe Gln Arg Gly Tyr His Val Pro Val Ala Val Cys Arg Ser
             20
                                  25
                                                      30
Thr Val Arg Met Ser Ala Glu Gln Val
         35
<210> 4
<211> 15
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic
      peptide
<400> 4
Cys Gly Glu Pro Leu Tyr Glu Pro Ser Arg Glu Met Arg Arg Asn
                                                          15
                                      10
  1
<210> 5
<211> 200
<212> PRT
<213> Bos taurus
<400> 5
Met Ala Met Lys Met Leu Val Ile Phe Val Leu Gly Met Asn His Trp
                                      10
                                                          15
  1
Thr Cys Thr Gly Phe Pro Val Tyr Asp Tyr Asp Pro Ala Ser Leu Lys
                                                      30
                                  25
             20
Glu Ala Leu Ser Ala Ser Val Ala Lys Val Asn Ser Gln Ser Leu Ser
         35
                                                  45
Pro Tyr Leu Phe Arg Ala Phe Arg Ser Ser Val Lys Arg Val Asn Ala
     50
                                              60
                         55
Leu Asp Glu Asp Ser Leu Thr Met Asp Leu Glu Phe Arg Ile Gln Glu
```

70

85

Thr Thr Cys Arg Arg Glu Ser Glu Ala Asp Pro Ala Thr Cys Asp Phe

80

95

75

90

65

Gln Arg Gly Tyr His Val Pro Val Ala Val Cys Arg Ser Thr Val Arg 100 105 110

Met Ser Ala Glu Gln Val Gln Asn Val Trp Val Arg Cys His Trp Ser 115 120 125

Ser Ser Ser Ser Ser Ser Ser Glu Glu Met Phe Phe Gly Asp Ile 130 135 140

Leu Gly Ser Ser Thr Ser Arg Asn Ser Tyr Leu Leu Gly Leu Thr Pro 145 150 155 160

Asp Arg Ser Arg Gly Glu Pro Leu Tyr Glu Pro Ser Arg Glu Met Arg 165 170 175

Arg Asn Phe Pro Leu Gly Asn Arg Arg Tyr Ser Asn Pro Trp Pro Arg 180 185 190

Ala Arg Val Asn Pro Gly Phe Glu 195 200

<210> 6

<211> 25

<212> PRT

<213> Homo sapiens

<400> 6

Phe Pro Leu Ala Asp His Leu Asn Ser Thr Asn His Ala Ile Val Gln 1 5  $\sim$  10 15

Thr Leu Val Asn Ser Val Asn Ser Lys
20
25

<210> 7

<211> 25

<212> PRT

<213> Homo sapiens

<400> 7

Phe Pro Val Tyr Asp Tyr Asp Pro Ala Ser Leu Lys Glu Ala Leu Ser 1 1 5 15

Ala Ser Val Ala Lys Val Asn Ser Gln
20 25

<210> 8

<211> 19

<212> PRT

<213> Bos taurus

<400> 8

Cys Asp Ile His Val Leu Lys Gln Asp Gly Gln Phe Ser Val Leu Phe 1 5 10

Thr Lys Cys

```
<210> 9
<211> 18
<212> PRT
<213> Homo sapiens
<400> 9
Cys Val Ala Val Trp Arg Lys Asn Asp Glu Asn Ile Thr Leu Glu Thr
                                                          15
                                      10
  1
Val Cys
<210> 10
<211> 19
<212> PRT
<213> Bos taurus
<400> 10
Cys Arg Ser Thr Val Arg Met Ser Ala Glu Gln Val Gln Asn Val Trp
                                                          15
  1
                                      10
Val Arg Cys
<210> 11
<211> 13
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic
      peptide
<400> 11
Glu Ser Glu Ala Asp Pro Ala Thr Cys Asp Phe Gln Arg
  1
<210> 12
<211> 12
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic
      peptide
<400> 12
Val Asn Ser Gln Ser Leu Ser Pro Tyr Leu Phe Arg
                                      10
  1
```

```
<210> 13
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic
      peptide
<400> 13
Ser Arg Gly Glu Pro Leu Tyr Glu Pro Ser Arg
                                     10
<210> 14
<211> 11
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic
      peptide
<400> 14
Asn Ser Tyr Leu Leu Gly Leu Thr Pro Asp Arg
  1
                                      10
<210> 15
<211> 10
<212> PRT
<213> Artificial Sequence
<220>
<223> Description of Artificial Sequence: Synthetic
      peptide
<400> 15
Gly Tyr His Val Pro Val Ala Val Cys Arg
                  5
```

l